Existing					EPA Work Ite	ems ⁹	LWG Work It	tems ⁹	Target EPA/LWG			Current Issue Resolution Target Dates or EPA Draft ds Text Target Dates		LWG Review and Resolution Text Target Dates	
Draft FS Sections	Issue No.	EPA Issue Decision	EPA Issues Summary Description	EPA Issue Resolution Current Status	Item	Target Date ¹	Item	Target Date ¹	Meeting Date to Discuss	LWG ⁵	EPA ⁶	Start ^{7,8}	Finish	Start	Finish
ES	ES Writing	NA	NA	NA	NA	NA	NA	NA		NA	NA	8-Aug-14	17-Dec-14	24-Jan-15	23-Feb-15
1, 2	Sec. 1 Writing	NA	NA	NA	NA	NA	NA	NA		NA	NA	14-Jan-14	2-Jul-14	8-Jul-14	8-Aug-14
	2.1	RAO supporting narrative additions	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
		COC Selections	LWG is requesting clarifications.	follow up summary on 12-Dec-13 in response to LWG questions. LWG provided additional COC selections questions to EPA on 21-Feb-14. EPA provided COC selections table to LWG on 25-Feb-14. EPA provided updated COCs table on 14-Mar-14. EPA additional revisions to COCs table was provided on 12-Apr-14. LWG provided outstanding issues list on 23-Apr-14.	COC selections table	Done	LWG Review 12-Apr-14 version of table and determine if any concerns exist	Done	27-Feb-14, 18-Mar- 14, 27-Mar-14, 24- Apr-14, and 8-May- 14			21-Feb-14	23-May (suggested date)	NA	NA
	2.3	PRG selections (including background values as needed)	EVEN TO STATE THE PRESS OF USE OF SOME PRGS (e.g., tissue target levels)—subject to additional discussions. Source of background-based PRG values needs verification for some chemicals. Spatial scale application of new PRGs needs clarification.	14. EPA provided direct contact human health PRG calculations and PRG spatial scales on 3-Mar-14 as well as updated PRGs. EPA provided updated PRGs and ecological PRGs tables on 14-Mar-14. EPA provided human health fish consumption PRG calculations tables on 18-Mar-14. EPA additional revisions to PRGs table was provided on 12-Apr-14. EPA provided BaPEq PRG calculations on 12-Apr-14. The EPA write-up for BapEq PRG will be provided with the Section 2 write-up at a later date (Updated per 7-Apr-14 email from Kristine Koch). EPA provided updated spatial scales email on 18-Apr-14. LWG provided outstanding issues list on 23-Apr-14. During 8-May-14 meeting it was agreed that LWG could provide proposals on Dioxin/Furan TEQ RAO 2 PRG and Mn Eco. water toxicity values. EPA provided spreadsheets for human health fish consumption PRG calculations on 16-May-14.	5	[provided on 12- Apr-14] 2) Done 3) No action 4) Done [Updates provided on 18- Apr-14]	4) LWG review EPA spatial scales. Also, provided PRG outstanding issues list on 23 Apr-14.		27-Feb-14, 18-Mar. 14, 27-Mar-14, 24- Apr-14, and 8-May- 14		Allen, Shephard	4-Mar-14	23-May (suggested date)	NA	NA
3.2-3.7, 6	Sec. 2 Writing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2-Jun-14	20-Aug-14	25-Aug-14	24-Sep-14
	2.4 (moved from Sec. 2)		EPA comments on draft FS disagreed with MNR lines of evidence approach including model use. Some discussions of model concerns have taken place, but these concerns were not resolved. The LWG believes may of the disagreements may be resolved through a more thorough discussion of the Site CSM. The LWG does not understand EPA's overall set of potential changes to MNR LOEs and modeling approach.	In progress: Hayter ran linked model and compared to LWG model on 24-Jan-13. LWG provided additional information on 15-Mar-13, 20-Mar 13, and 11-Apr-13. The 20-Mar-13 deliverable compared linked and unlinked model results and found only small differences, suggesting model concerns could be resolved as an uncertainty discussion in the revised FS. EPA requested additional bed elevation info 20-Nov-13. LWG provided bed elevation info 5-Dec-13. EPA requested additional information on modeled bed elevation changes and bedded sediment chemical concentration changes on 14-Mar-14. LWG provided requested information on 10-Apr-14.	memo on model useCDM/COE recommendations on evaluation and use of LOEs	due]		None	EPA suggested postponing until Section 4 issue discussions	Russell, Werth, Ziegler	Gustavson, Hayter		TBD	NA	NA
	2.5 (moved from Sec. 2)	Capping evaluation methods (suitable areas): flux and stability	EPA informal FS presentations indicated potential changes to application of capping technologies to subSMAs or capping type variations (e.g., reactive capping).	Not started: Proposed changes not known yet.	Provide description of proposed technology application changes or existing concerns.	25-Mar-14 [past due]	None currently identified	None	5-Jun-14 and 10- Jun-14	Henderson	Gustavson, King	24-Apr-14	11-Jun-14	NA	NA
	(moved from Sec. 2)		EPA informal FS presentations indicated potential changes to application of EMNR technology to subSMAs.		Provide description of proposed technology application changes or existing concerns.	due]	None currently identified	None	5-Jun-14 and 10- Jun-14	Russell, Werth	Gustavson, King	24-Apr-14	11-Jun-14	NA	NA
	from Sec. 2)	In-situ treatment evaluation methods (suitable areas)	EPA informal FS presentations indicated potential changes to application of in-situ treatment.	Not started: Proposed changes not known yet.	Provide description of proposed technology application changes or existing concerns.	due]	None currently identified	None	5-Jun-14 and 10- Jun-14	Gardner	Gustavson, King		11-Jun-14	NA	NA
	2.8 (moved from Sec. 2)	Changes to identification and selection of technologies (e.g., technology assignment decision tree) Focused COC selections (RAL COCs)	EPA informal FS presentation indicated potential changes to criteria used to assign technologies to subSMAs. Changes to application criteria expected. See Issue 3.3	EPA provided presentation of technology selections approach on 1-Apr-14. EPA indicated the assessment was not yet completed. Additional exchanges of information from EPA and LWG identified. Issue discussed again on 24-Apr-14, where LWG provided some suggested refinements to the technology screening process. Several action item exchanges of information were identified. LWG provided refined structures layer from draft FS on 29-Apr-14. LWG provided capping and EMNR slope references to EPA on 10-May-14. Map showing EPA pixels as compared to LWG subSMAs was sent EPA on 9-May-14. LWG provided rock/cobble information to EPA on 8-May-14.	Provide description of proposed technology application changes or existing concerns. See Issue 3.3	Due 18-Mar-14 (draft provided 1- Apr-14)	LWG provide feedback on EPA's technology matrix [Done at 24-Apr-14 meeting LWG to follow up in writing.].	None . See Issue 3.3	22-May-14, 5-Jun- 14 and 10-Jun-14	Russell, Werth, Henderson, Gardner, Verduin, Laplante	Gustavson, King	24-Apr-14	11-Jun-14	NA NA	NA NA
		(in a coos)													

Existing			EPA Issues Summary Description	EPA Issue Resolution Current Status	EPA Work Items ⁹		LWG Work Items ⁹		Target EPA/LWG	Tentative Technical Leads		Current Issue Resolution Target Dates or EPA Draft Text Target Dates		LWG Review and Resolution Text Target Dates	
Draft FS Sections	Issue No.	EPA Issue Decision			Item	Target Date ¹	Item	Target Date ¹	Meeting Date to Discuss	LWG⁵	EPA ⁶	Start ^{7,8}	Finish	Start	Finish
Sections		Integration of SDU analysis	, .	In progress: EPA is conducting the SDU analysis. This information would be presented to LWG in the context of SMA discussions to determine whether any SMA changes should be made or not. Discussions would also help determine how the SDU analysis would be presented in the revised FS and be used to support the SMA determinations. EPA provided to LWG a portion of the SDU analysis on 28-Mar-14, and indicated on 27-Mar-18 that portions of the analysis are yet to be completed (e.g., risk reduction evaluation).	● EPA provide SDU information.		1) LWG review SDU	4-Apr-14	3/27/2014 (partially discussed). Remainder of analysis to be discussed on 31- Jul-14 and 5-Aug- 14.	Iverson	King	28-Apr-14	8-Aug-14	NA	NA
	3.3	RAL selections and application (dioxin RAL)	1 1 2000	RALs again on 13-Nov-13 and provided a follow up summary on 12-Dec-13 in response to LWG questions. EPA indicated a new potential D/F TEQ RAL on 30-Jan-14. LWG provide additional questions on DDx RALs rationale on	comparative SWACs for DDE	3) Done	1) LWG review rationale and maps 2 LWG review 2011 RALs rationale and prepare additional questions. LWG then review EPA's SWACs 3 LWG provide expanded discussion BaPEq RAL application disagreement	1) Done 2) Done 3) Done	13-Mar-14		King	13-Mar-14	23-May-14	NA	NA NA
	3.4	Comprehensive benthic risk area changes	Are the comprehensive benthic risk areas presented in the draft FS acceptable to EPA? What specific CBRA criteria may be of concern and why?	and LWG technical leads discussed additional EPA questions	● EPA review LWG info and propose modifications to CBRAs, if necessary.		LWG awaiting any additional information requests and EPA determination of any CBRA changes. LWG identify any concerns about these new benthic risk rules	1) Done 2) Done	13-Mar-14 (Discussed again on 18-Mar-18 and 24-Apr-14).	Toll	King, Shephard	13-Mar-14	2-May-14	NA	NA
	3.5	Principal Threat Material determinations	has indicated disagreement with this conclusion but has	Not Started: EPA has an internal CDM memo from 25-Jul- 13. EPA postponed discussion to mid-April 2014. EPA provided PTW memo on 10-Apr-14 and PTW presentation on 15-Apr-15. EPA indicated that additional evaluation steps for PTW are yet to be conducted.	①EPA identify potential PTM areas and supply maps and rationale.	Due 8-Apr-14 (Provided on 10- Apr-14)	LWG review PTW memo and presentation and provide feedback to EPA	25-Apr-14 (new date)	15-Apr-14 (partially discussed). Remainder of analysis will be discussed on 5-Jun-		Blischke, Sheldrake	3-Mar-14	13-Jun-14	NA	NA
	3.6	Oregon Hot Spots determination	Spots. EPA and DEQ have indicated disagreement with this conclusion but have not provided a specific rationale or information on proposed changes to Hot Spot areas.	Not Started: EPA has provided some GIS mapping information to DEQ on this issue. DEQ is conducting evaluations on this issue. EPA postponed discussion to mid-April 2014. EPA indicated on 15-Apr-14 that Oregon Hot Spots were not an ARAR, and DEQ provided a letter that they had ceased work on Hot Spots for Portland Harbor.	● DEQ identify potential Oregon Hot Spot areas and supply maps and rationale to EPA and LWG.	Suspended	None currently identified	None	Suspended		Gainer	3-Mar-14	Suspended	NA	NA
	3.7	TZW area changes (SMA impacts)	EPA comments indicated that HQ>100 threshold should not be used to assess TZW impact areas. Depending on how EPA would like to revise this approach, it could impact the size and shape of SMAs.	Issue was discussed on 1-Apr-14. EPA indicated that no changes to SMAs would occur due to TZW area evaluations. However, EPA selection of technologies (Issue 2.8) in groundwater plume areas may be revised. Issue resolved.	① EPA provide additional information on draft FS TZW impact analysis concerns.	Done [via verbal / discussion]	None currently identified	None	1-Apr-14		Fuentes	17-Mar-14	1-Apr-14 [date resolved]	NA	NA
	3.8	SMA revisions	will determine whether any SMA changes are needed for the revised FS.	LWG provided memo on process decisions steps for incorporating RALs for Alts B, C, D on 17-Jan-14. RALs discussions that potentially impact SMA boundaries have progressed through 14-Mar-14. No progress on this issue occurred when it was last discussed on 1-Apr-14. Discussed on 8-May-14 and several mapping action items were identified for further discussion on 22-May-14. SMA comparison maps were provided to EPA on 9-May-14 and 14-May-14.	●EPA review LWG RALS memo	25-Mar-14 [past due]	See Action Items List	None	8-May-14, 22-May- 14, 31-Jul-14, and 5-Aug-14		King, Gustavson	5-May-14	6-Aug-15	NA	NA
				Discussed on 8-May-14 and several action items were defined for futher discussion. Buried contamination maps and tables were provided to EPA on 9-May-14.	None identified	NA	See Action Items List	NA	8-May-14 and 31- Jul-14?		Blischke, Gustavson	26-May-14	1-Aug-14 [suggested date]	NA	NA
	3.10	SubSMA revisions ²	EPA has yet to determine how technology screening and SDU analysis will impact subSMA development, if at all.	Discussed on 8-May-14. Requires further discussion.	None identified	NA	None identified	NA	8-May-14, 31-Jul- 14, and 5-Aug-14		King, Gustavson	2-Jun-14	6-Aug-14	NA	NA

Existing Draft FS	Issue				EPA Work Items ⁹		LWG Work Items ⁹		Target EPA/LWG Meeting Date to			Current Issue Resolution Target Dates or EPA Draft Text Target Dates		LWG Review and Resolution Text Target Dates	
Sections	No.	EPA Issue Decision	EPA Issues Summary Description	EPA Issue Resolution Current Status	Item	Target Date ¹	Item	Target Date ¹	Discuss	LWG⁵	EPA ⁶	Start ^{7,8}	Finish	Start	Finish
	3.11	Disposal site assignments (including CDF decisions and screening of disposal options)	EPA has indicated the desire to change the disposal site selections for each alternative including "present Alternatives C through G without CDF construction (assume all dredged material is taken offsite), and the remedial options that would be used in the areas that were within the footprint of the CDFs."	Chip Humphrey and Jim McKenna agreed to have a technical discussion before any information was provided by LWG. Discussed on 8-May-14, action items were identified for further discussion.	None identified	NA	See Action Items List	NA	8-May-14 and 31- Jul-14	Schwarz, Verduin	Sheldrake	26-May-14	1-Aug-14 [suggested date]	NA	NA
	3.12	CDF sediment and discharge water treatment	EPA provided information requests on these topics on 20 Nov-13.	Chip Humphrey and Jim McKenna agreed to have a technical discussion before this information was provided by LWG. Discussed on 8-May-14, action items were identified for further discussion. LWG provided answers to several EPA questions on CDF disposal on 14-May-15. Sean Sheldrake provided additional questions and information requests to LWG on 15-May-14.	None identified	NA	See Action Items List	NA	8-May-14 and 31- Jul-14	Schwarz, Verduin	Sheldrake	2-Jun-14	1-Aug-14 [suggested date]	NA	NA
	3.13	Changes to volume estimates and dredge depth assumptions	EPA has indicated these estimates may need to be changed.	EPA will provide information on proposed methods prior to 22-May-14 meeting.	None identified	NA	None identified	NA	22-May-14	Verduin	King	2-Jun-14	6-Aug-14	NA	NA
	3.14	Screening of alternatives methods (including screen of Alt G.)	EPA has indicated a desire for a new alternative screening process.	Not started	None identified	NA	None identified	NA	31-Jul-14 and 5- Aug-15		King, Blischke	16-Jun-14	6-Aug-14	NA	NA
	3.15	Number of alternatives selection	EPA has indicated that the numbers and types of alternatives passing through to detailed evaluation may change.	Not started	None identified	NA	None identified	NA	31-Jul-14 and 5- Aug-15		King, Blischke	30-Jun-14	6-Aug-14	NA	NA
			EPA added this issue to the issue matrix.	Not started	None identified	NA	None identified	NA	TBD		Sheldrake	TBD	TBD	NA	NA
	Sec. 3 Writing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16-Aug-14	18-Oct-14	23-Oct-14	22-Nov-14
	4.1	Alternative options selections or refinements (e.g., -r and -i)								Verduin	King, Blischke	7-Jul-14	11-Jul-14	NA	NA
	4.2	Sequence of SMA remediation								Verduin	King, Blischke, Sheldrake	14-Jul-14	18-Jul-14	NA	NA
	4.3	Duration calcs. (prod. rates, no. of dredges, hour/day, etc.)								Verduin, Laplante	Gustavson, Schroeder	21-Jul-14	25-Jul-14	NA	NA
	4.4	NMFS work window assumptions								Laplante, Appy	Sheldrake	28-Jul-14	1-Aug-14	NA	NA
		Dock removal decisions Dredge water quality containment decisions (e.g., sheet piles)								Verduin, Laplante Verduin, Laplante	King, Sheldrake Gustavson, Schroeder, Sheldrake	4-Aug-14 11-Aug-14	8-Aug-14 15-Aug-14	NA NA	NA NA
	4.7	Dredge residuals and release assumptions								Verduin, Laplante, Patmont	Gustavson, Schroeder, Sheldrake	18-Aug-14	22-Aug-14	NA	NA
		Habitat mitigation calculations								Appy, Oster	Sheldrake	25-Aug-14	29-Aug-14	NA	NA
	4.9 4.10	Changes to cost estimate methods ³ Changes to evaluation spatial scales								Verduin Iverson, Werth	Hazen, King	1-Sep-14 8-Sep-14	5-Sep-14 12-Sep-14	NA NA	NA NA
	4.11	presentation T=0 risk reduction and forward						+		Russell, Werth	King, Blischke,	15-Sep-14	26-Sep-14	NA	NA
	4.12	projections (e.g., T=45) Changes to time to meet RAOs									Allen	29-Sep-14	3-Oct-14	NA	NA
	4.13	evaluation F&T modeling revisions/reruns vs.						1		Russell, Werth,	Gustavson, Hayter	6-Oct-14	17-Oct-14	NA	NA
+	4.15	alternate approaches Flood rise modeling changes				+		+	1	Zeigler Zeigler	Sheldrake, COE	20-Oct-14	24-Oct-14	NA	NA
	4.16	Worker risk calculation methods								Merritts	Sheldrake	27-Oct-14	31-Oct-14	NA	NA
\vdash	4.17 4.18	ESA compliance determinations Cost effectiveness evaluation			-	+			1	Appy, Oster Patmont	Sheldrake Blischke	3-Nov-14 10-Nov-14	7-Nov-14 14-Nov-14	NA NA	NA NA
		Scoring/weighting of alternatives ⁴						1		Patmont	Blischke, Gustavson	17-Nov-14	21-Nov-14	NA NA	NA NA
	4.20	Place holder for any other changes to alt. evaluation methods									34343511				
	Sec. 4 Writing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1-Nov-14	19-Jan-15	24-Jan-15	23-Feb-15
11	Ref. Section	NA A Reivew of the Complete FS	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	1-Jan-14 NA	23-Feb-15 NA	NA 28-Feb-15	NA 4-Aug-15

Color indicates who has any lead items, while 1 indicates specific items for which the lead is designated (i.e., who has the "ball").

Color indicates section writing process after all issues related to that section are resolved.

1 - Target dates for work items generally shown to be one week before issue resolution target start date.

2 - Per the LWG's 16-Jan-2014 RALs memo, developing new subSMAs and assigning new technologies is expected to take 4 to 10 weeks on this period is included in the dates shown above for resolution of issues prior to 3.9. Therefore, depending on the level of EPA changes, an additional 4 to 6 weeks could be needed

at this point in the above process to fully integrate all the EPA changes into revised alternatives.

3 - Per the LWG's 16-Jan-2014 RALs memo, developing new alternatives with changes to the methods addressed by issues 3.10 through 3.23 is expected to take 4 to 8 weeks. None of this additional time is included in the dates shown above, which only include time to determine and resolve the need for changes for each of the noted issues.

4 - Per the LWG's 16-Jan-2014 RALs memo, conducting revised evaluations of new alternatives with changes to the evaluation methods addressed by issues 4.1 through 4.10 is expected to take 6 to 12 weeks. None of this additional time is included in the dates shown above, which only include time to determine and resolve the need for changes for each of the noted issues.
5 - All LWG teams include Carl Stivers and Amanda Shellenberger.

6 - All EPA teams may include representation from Chip Humphrey or Kristine Koch.

7 - EPA will determine prior to the current issue resolution target start date whether EPA has a confirmed issue with the draft FS approach. If so, all issue supporting analyses must be completed and supporting materials made available prior to the issue resolution target start date.

8 - Dates for section text revisions will be pushed back if all the issues related to that section have not been successfully resolved by the draft text target start date.

9 - All of the noted work products (EPA and LWG) are considered "drafts" during this informal discussion process.

All dates are subject to change

Any informal dispute process for the set of issues in each section would occur by the final date of the last issue resolution in that section.

This matrix identifies the EPA and LWG tentative technical leads for each issue. Additional EPA and LWG technical staff may be identified on an issue-specific basis to attend various meetings.

 $Do \ Not \ Quote \ or \ Cite-Preliminary \ Discussion \ Draft-May \ Contain \ Errors-Restricted \ Distribution. \ The \ comments \ or \ changes \ (including \ redlines) \ on \ this \ document \ may \ not \ reflect \ LWG \ positions \ or \ the \ final \ resolution \ of \ EPA \ comments.$

TBD - EPA is currently revising text revisionschedules, and these dates will be determined soon.